

# Centenary



## ACADEMIC RESEARCH CONFERENCE

April 16, 2019

Every year, Centenary students and faculty are invited to present their best works of exploration and invention at our annual Research Conference. A community tradition for over 20 years, the Research Conference is modeled on long-standing academic traditions of conference-based information sharing and feedback.

The 2019 Research Conference is sponsored by the Douglas F. and Marion S. Attaway Foundation, and is made possible with the support of Centenary's Convocation Committee, the Office of the Provost, the Student Government Association, and the Campus Activities Board.

This year's Research Conference was organized by Dr. Scott Chirhart (Biology), Dr. Jeanne Hamming (English), Dr. Cory Wikan (Music), and Mr. Logan Sledge (Theatre)

*Generous thanks to our judges:*

- Trek Presentations: Emmaline Dyer, Brandon Fail, Harrison Folsom, Chad Fulwider, Luke Groninger, Michael Hicks, Mark Miller, and Monica Powell
- Poster Presentations: Jeffery Evans, Rebecca Murphy, and Jarret Richardson
- Humanities Oral Presentations: Don Hooper and Steve Shelburne
- Social Science Oral Presentations: Amy Hammond and Kyle Ristig
- Natural Science Oral Presentations: David Bieler and Joshua Lawrence
- Visual and Performing Arts: John Gayle, Jeanne Hamming, David Havird, Jeff Hendricks, Jeremy Johnson, Michael Laffey, Kalah Roberts, and Steve Shelburne

Winners from this year's Research Conference will be presented with awards at the Annual Honors Convocation, Friday, May 3, at 5:00pm in Brown Chapel.

8:30-11:30 **Trek 116 Presentations**

- A. Whited Room
- B. Kilpatrick Auditorium
- C. Mickle 114
- D. Hurley 201

9:00-12:00 **Poster Sessions**

Mickle Hall, Second Floor

1:30-2:30 **Research Presentations, Session 1**

- A. Humanities: Whited Room
- B. Social Sciences: Kilpatrick Auditorium
- C. Natural Sciences: Mickle 114

2:45-3:45 **Research Presentations, Session 2**

- A. Humanities: Whited Room
- B. Social Sciences: Kilpatrick Auditorium
- C. Natural Sciences: Mickle 114

4:00-5:00 **Research Presentations, Session 3**

- A. Humanities I: Whited Room
- B. Humanities II: Mickle 114
- C. Social Sciences: Kilpatrick Auditorium

5:00-7:00 **Dinner**

Quad (The Fit if bad weather)

7:30-9:00 **Visual and Performing Arts**

Anderson Auditorium

**8:30-11:30 TREK 116 PRESENTATIONS****A. WHITED ROOM**

8:30-9:20

**Seeing in the Dark: The Devices and Desires of American Detective Fiction**

STEVE SHELBYRNE

*Presenters: Camden Cooper, Rachel Demerjian, Callie Fedd, Ezri Gomez, Brandon Griffin, Zuri Jenkins, Teri Johnson, McKenzy LeJeune, Cole Mrozek, Virginia Passman, Sethan Ward, Hayden Weber, Sara Wintner, Lindsay Zwald*

To introduce the conventions of American detective fiction, our class has created a mixed-media performance that both engages and informs the audience. The presentation includes a live dramatic vignette, video clips, and real-time audience responses through which we display the key tropes of the genre. For its part, the audience must try to solve the central question of any detective mystery: Who done it?

9:30-10:20

**Highland Story Project**

MICHELLE GLAROS

*Presenters: Jo Bennett, Abigail Cruice, Emily Evans, Joseph Holmes, Peyton McKinney, Kile Mingo, Andrew Russell, Hannah Scoggin, Reygan Taylor, Drew Whaley*

To give a community or group of people a voice is a good thing, but to give a group of people or community a way to pass on and keep their traditions alive is something special. That is the purpose of the Highland Story Project: to take the beliefs, ways, and traditions of many different groups of people that as a whole make up the Highland community, and share those beliefs and the impact they make on those around them. This project gives insight to many different aspects of the Highland neighborhood and its people. It is an outsider's view of the different places in the area that were researched and observed over time. At the beginning many of us were anxious to begin this project, but as time went on, our confidence built and our understanding for each of our sites broadened. Many assumed that Highland was not an ideal place to be a part of, but upon observing, interviewing, and researching, we now see a sense of community that we didn't before.

One thing that stuck out to us from each team members' projects is that when we first heard about each of the sites they seemed like "normal" places. As more research and information was gathered and shared, we noticed that from the outsider's view we wouldn't see or understand the impact each place has on this community. Taking a look from the inside out you see a sense of pride, a helping hand, or a community of people

that just wants to better those around them. While each site has its own quirks and individual factors, they all had that feeling of being a part of something bigger, and that is what was striking to us. At the end of the semester, we are excited to publicly present this project to both the campus and neighborhood.

10:30-11:20

**Mating & Dating in the 21st Century**

AMY HAMMOND

*Presenters: Sami Borchalli, Ryan Byrne, Caitlin Covington, Mike Denham, Logan Digilormo, McKenzie DuBois, Andrew Dzurik, Nick Garcia, Hannah Loyd, Ty Prince, Emma Sale, Avery Sanderson, Gavin Thomas, Prentis Washington*

Mating and Dating in America is complex and multi-faceted. In our presentation, we're going to provide you with our spin on a speed dating event—Speed Learning—in which you'll have the opportunity to rotate through several mini-presentations. These will cover five different topics.

- *Societal Influences on Sexual Behavior:* The ways in which America's discomfort with non-normative sexual behaviors prevents us from having a conversation about what healthy relationships look like.
- *The New Hookup Culture:* How today's hookup culture is a demonstration of the ways in which dating has changed—not always for the better.
- *DON'T Just Do It! Consent First:* Why enthusiastic, verbal consent before every sexual interaction is needed in order to avoid miscommunication and personal or legal consequences.
- *The Effects of Abuse and Early Signs of Abusive Behavior:* Education about domestic and relationship abuse—the various forms it can take and misconceptions about it—will go a long way to reducing its prevalence.
- *It's Complicated: Online Communication in Relationships:* How online communication has had an overall negative effect on relationships today.

**B. KILPATRICK AUDITORIUM**

8:30-9:20

**Have They Aged Well?: An Examination of “Classic” 1980’s Coming of Age Films**

MARK LEEPER

*Presenters:* Jackie Ancelet, Marichael Clarin-Jante, Alyssa Davis, Elizabeth Epley, Margot Frost, Danny Horn, Cameron James, Xavier Johnson, Laura Knipper, JaDonte Miles, Haley Palmer, Matt Parker, Cole Schultz, Colin Schultz, Riley Seeton, London Todd, Miguel Vasquez

A generation of American kids enjoyed, watched, and usually watched again the classic “teen” films of the 1980’s. There was a seemingly quirky and funny innocence to the films, particularly the films of John Hughes (e.g. *Some Kind of Wonderful*, *Pretty in Pink*, *Breakfast Club*, *Ferris Bueller*, and especially *Sixteen Candles*). This study takes a fresh look at one of these films—*Sixteen Candles*—and examines whether it would be viewed so benignly today. Are there surprising moments that seem to evoke humor at scenes uncomfortably close to date rape and racial caricature? Is there an underlying pattern of objectifying women? How did film critics and Americans view the film for a generation, and what has prompted shifting evaluations today?

9:30-10:20

**Become a Mentor**

CHRIS CIOCCHETTI

*Presenters:* Kayla Collins, Veronica Dougherty, Divine Martin, Kierston McPherson, Brenlyee Meaux, Allie Moore, Priya Ponia, Patrick Riley, Charlie Roppolo, Shane Salzman, Kendall Sanders, Xian Seamon-Baumgartner, Sherry Shaw, Itzel Sigaran, Tori Sparks, Gia Szczepanski

Caddo Parish deprives some students of an adequate education promised by the public school system, and necessary for a promising future. The school district has a graduation rate of about 75% or lower. Students who drop out are much more likely to become incarcerated compared to those that graduate high school. Thus, the drop-out rates in Caddo Parish schools directly contribute to the high incarceration rate in the Parish.

Our class has concluded that by helping our Caddo Parish students graduate, they can, in turn, lower the incarceration rate in the community. We will reduce drop-out rates in nearby schools by creating a mentoring system that targets students who are at high-risk for dropping out. Mentoring programs have proven to be most beneficial to high-risk students in middle school. We have the potential to make a change here. We are asking fellow Centenary students to join us in mentoring middle school students to fulfill their Trek 153 requirement and begin a systemic change in Caddo Parish.

10:30-11:20

**Leadership in Flight**

KAREN SOUL

*Presenters:* Breana Coco-Serna, Caroline Evensky, Cason Hancock, Tewana Hawkins, Diego Hernandez, Matthew Hilbrich, Erica Hoops, Lauren Kelley, Elizabeth Matthews, Gabriella McDonald, Kathryn McKnight, Rickey Ray, Settar Sattarov, Dylan Scott, Tykeem Singleton, Haley Smith

What is a leader? Who is a leader? Our class studied leadership – reading about best practices in leadership and hearing from college and community leaders about their experiences and philosophies. We have come to believe that leadership includes qualities such as trust and vulnerability and actions such as living in beta, reflecting, modeling the way, and challenging the process. To put our learning into action, we researched community needs and implemented service learning projects in small groups. One group worked with high school students to teach them how to evaluate the “risk vs. reward” of drug use. Another group met with veterans and provided a special meal to address issues of mental health and loneliness. Our final group brought connection and fun to elderly individuals in nursing homes by playing games. In our presentation, we will lead the audience through a leadership activity, discuss our service learning project outcomes, and share our reflections on leadership.

**C. MICKLE 114**

8:30-9:20

**Dystopias and the Real World: Perspectives from Literature and Film**

EMILY LEITHAUSER

*Presenters:* Diane Battaglia, Corey Bowe, Sadie Brannan, Colbee Duke, Lily Ann Easley, Iqra Jatoi, William Kappler, Maddie LaBorde, Mallorie Magnuson, Annalee Mathews, Mallarie Mixon, America Moreno, Dakota Smith, Mallori Smith, Sarah Thompson, Jonas Varela, Jaymee Wilkinson

This presentation examines how dystopian literature and film have registered and reimagined social, cultural, and historical events and movements in the 20th and 21st centuries. Presenters will ask how culture and art intersect against the backdrops of rising totalitarianism and fascism, the Vietnam and Korean Wars, the Women’s Movement, and the War on Terror, among other historical phenomena. Presenters will explore how these events have affected not only the literary world, but also have influenced the American public and our current political climate. Presenters will approach dystopian fictions and their connections to real world events from four different angles: conformity and the erasure of

individualism; historical perspectives on censorship; propaganda and brainwashing, with a special focus on World War II; and the links between technology and culture, with a particular emphasis on how writers of dystopian literature give voice to cultural anxieties about technological change. A range of texts will be discussed, including George Orwell's *1984*, Margaret Atwood's *The Handmaid's Tale*, Kurt Vonnegut's "Harrison Bergeron," Cormac McCarthy's *The Road*, Lois Lowry's *The Giver*, and episodes from *Black Mirror*.

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9:30-10:20

## **Aliens Among Us: Constructing Otherness in Science Fiction**

JEANNE HAMMING

*Presenters: Baylee Barajas, Dartagnan Bennett, Devin Bureau, Clarissa de Santiago, Ryan Harris, Daniel Hernandez, Coleton Hinkle, Wendy Jimenez, Mary-Claire Jones, Daniel Lewis, Tripp Montgomery, Ariel Mosley, Milla Reddick, Lucas Stetter, Matthew Stogner*

Science fiction is a testing ground that allows us to explore questions without being limited by our assumptions about reality. In the words of Ursula K. Le Guin, "[t]he future is a safe, sterile laboratory for trying out ideas in, a means of thinking about reality, a method." The thought experiments in science fiction encourage us to think critically about beliefs we take for granted. The aliens we focus on are not invaders from Mars, but fellow humans who have been cast off as "others." In this presentation we will show how science fiction, which is not as fictional as the name implies, allows us to better understand how classifications such as "otherness" are constructed—how people are categorized into us and them, self and alien—and how this alienation affects us.

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10:30-11:20

**All presenters go to Kilpatrick Auditorium**

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## **D. HURLEY 201**

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8:30-9:20

## **Mormons in America: Where do they fit?**

ROSS SMITH

*Presenters: Cameron Craig, Isabel Frederick, Madelyn Frederick, Tyler Garrett, Sarah Harrison, Abby Hayes, Mitchell Lulich, Kat Martinez, Hannah Mitchell, Brianna Serret, Lindsay Strohm, Kaylin Swoboda*

Revered and reviled, lauded and loathed, The Church of Jesus Christ of Latter-day Saints (Mormons) and its members are increasingly pushed to the forefront of public attention. As the fastest growing religious

denomination in American history, most people know something about Mormons. However, most of these same people really know very little about what it actually means to be a Mormon. This film documentary and class presentation identifies the perception of Mormons in our society, contrasting stereotypes with the views and doctrines believed by practicing Mormons. We will explore the ideas of Mormonism contained in *The Book of Mormon* and other scripture, the history and contributions of founder Joseph Smith, and how these impact current practices in the Church. We will explore accusations and misconceptions non-Mormons have about the Church.

The controversial debate on the Christianity of Mormons will be examined along with other contentious ideas that can dampen the public view of Mormons, including Church policy regarding the LGBTQ community, allegations of racism, roles of women, polygamy, and politics. Watching *The Book of Mormon* Broadway musical, we were able to pick out of few songs to feature in our film to further explain several common misconceptions about Mormons. For example, the opening song, "Hello!" portrays Mormon missionaries in the way that society sees them, not in a realistic manner. Our documentary seeks to clarify how Mormons fit into American life and how the rest of American society can (or should) relate to this sub-culture of America.

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9:30-10:20

## **Innovation**

MICHAEL LAFFEY

*Presenters: Tory Carman, Emily Ellis, Nichole Gauntt, Carlos Ayma Gonzalez, Gary Hewitt, Sydney Howard, Kason King, Kendall Knaps, Emma Lamoine, Madison Mascagni, Joshua McLean, Connor Poche, Cameron Sineni, Julia Tertilova, Ian Veserra*

*Question: Do our best ideas come in a flash? Does a light bulb suddenly pop on and illuminate the darkness?*

*Answer: Not so fast.*

Our course has spent the semester engaging with the argumentative strategies and tactics deployed in two 21st century books by Steven Johnson. Johnson is an American popular science author and media theorist whose work explores, examines, and explains the fundamental characteristics and roles that innovation plays both in natural history and in human cultural development. In the first of these texts, *Where Good Ideas Come From: The Natural History of Innovation*, students were challenged to think differently about many of the "common sense" and "commonly accepted" everyday descriptions and explanations about creativity and invention. With Johnson's second text, *How We Got to Now: Six Innovations That Made the Modern World*, students were presented with unfamiliar stories behind six things we take for granted in our everyday lives: glass, cold, sound, clean, time, and

light. Students were assigned to conduct further research and produce arguments concerning the unexpected and unfamiliar roles played by that which we often overlook. These students' research has been presented throughout the semester in written essays, oral presentations, and now, in audio documentary recordings that have been assembled in the form of a podcast meant to provide a complementary supplement to Steven Johnson's publications. This audio project will soon be broadcast on KSCL-FM 91.5 FM, the Centenary College radio station.

10:30-11:20

**All presenters go to Whited Room**

### 9:00-12:00 POSTER SESSIONS

#### MICKLE HALL, SECOND FLOOR

#### 1. PV-FSI Activation in the mPFC and Alcohol-Seeking Behavior

CAMERON HEWETT

Research Advisors: Dr. Hyung Nam and Lailun Nahar, Department of Pharmacology & Toxicology and Neuroscience, Louisiana State University Health Sciences Center, Shreveport, LA

Reward-seeking behavior is governed by the cortico-striatal circuitry. However, this mechanism is not well understood on a cellular level. The medial prefrontal cortex (mPFC) is involved in behavior adaptations seen in cue-mediated behavior and the nucleus accumbens (NAc) is a major site of integration of affective, cognitive, and contextual information. The synaptic communication between these two brain regions is particularly important for the coordination and control of reward-seeking behavior. Our work focuses on whether Parvalbumin (Pv) expressing fast-spiking interneuron (Pv-FSI) activation in the mPFC promotes alcohol-seeking and compulsive behaviors. Previous work found that the activation of Pv-FSI in the mPFC increased reward-seeking behavior for natural rewards, like sucrose. To determine the role of the PV-FSI in the mPFC on alcohol pertaining to reward seeking and compulsive behaviors, Designer Receptors Exclusively Activated by Designer Drugs (DREADDs) in Cre-PV expressed mice were used. Mice were trained using classical and operant conditioning to press a lever for a 20% sucrose solution, which then was replaced with a solution of 10% ethanol and 20% sucrose solution. Fixed Ratio 1 (FR1) protocol was used to measure the operant response before and after DREADD activation of Pv-FSI in the mPFC using clozapine-N-oxide (CNO). Results will likely demonstrate consistent findings from our previous work which suggested that Pv-FSI plays a crucial role in the mPFC for reward-seeking behavior and in the NAc for compulsion. Similarly, in the current study, we expect that Pv-FSI activation using DREADDs in the mPFC will show an increase in alcohol-seeking behavior and no effects on compulsive behavior.

#### 2. Microglia and Astrocyte Activation in Select Ventilatory Control Regions Following Exposure to Chronic Sustained Hypoxia

Jada Faul and Kyle Barron

Research Advisor: Dr. Jennifer Stokes, Department of Biology, Centenary College of Louisiana

Understanding the role of glial cells in respiratory control regions is pertinent to understanding ventilatory control during chronic sustained hypoxia (CSH). The respiratory regions of interest in our lab are the Pre-Bötzinger Complex (PBC) and the nucleus tractus solitarius (NTS). The first part of this study optimized the Sholl analysis method to detect morphological changes in microglia. The second part of this study assessed the activation of microglia and astrocytes in the NTS and PBC following CSH. Based on previous research, we hypothesized that both astrocytes and microglia would be activated following CSH. Rats were exposed to normoxia, 60-minutes of CSH, or 12-hours of CSH. In the NTS, microglia analysis revealed a trend towards activation, but only one Sholl shell, 21-30 $\mu$ M, was statistically significant ( $p<0.05$ ). In the PBC, microglia analysis revealed a trend towards activation with statistically significant Sholl shells of 11-20 $\mu$ M and 21-30 $\mu$ M ( $p<0.05$ ). Astrocyte activation was not statistically significant across the conditions using the pixel intensity quantification method. Additional section analysis will be performed, as well as analysis of microglia cell body size and endpoint number. However, these data provide a great starting point assessing the activation profiles of glial cells in select respiratory control regions.

#### 3. Glial Cell Activation in the Retrotrapezoid Nucleus following Chronic Sustained Hypoxia

ALEX MORGAN

Research Advisor: Dr. Jennifer Stokes, Department of Biology, Centenary College of Louisiana

Hypoxia is a condition where the tissues in your body are deficient in oxygen. Central and peripheral chemoreceptors constantly monitor your arterial blood oxygen content. Chronic sustained hypoxia (CSH) can be caused by injury, disease, or your environment. The acclimatization to hypoxia is thought to take place in the nervous system, although the specific mechanisms are not yet understood. With knowledge of the mechanisms behind your body's response to CSH we can produce applicable strategies to combat many disease states like COPD and sleep apnea. The Retrotrapezoid Nucleus (RTN) respiratory control region is a thin sheet of cells that extend rostrally along the ventral surface of the trapezoid body in the pons. In this study the RTN was looked at and speculated to have a chemosensory response in the glial cells of RTN region following hypoxia based on the fact that glial cells have been shown to be active in other regions in response to the change in chemical composition of the blood. Response as determined by "activation" of the

glial cells either by protein upregulation (astrocytes) or a morphology change (microglia). The morphology of the microglia will be determined by Sholl analysis while the astrocytes will be assessed by pixel intensity/area analysis. From these analyses we will determine the "activation" of each glial cell quantified.

#### **4. Deducing the mechanism by which ebselen delays maturation and protects against oxidative stress in *C. elegans***

MADISON GUELL

Research Advisor: Dr. Kathrine Weeks, Department of Chemistry, Centenary College of Louisiana

Ebselen is an organoselenium compound that has activity similar to glutathione peroxidase, and is able to neutralize free radicals and protect the cell's components from oxidative stress. Due to ebselen's potent antioxidant activity, we hypothesized that it may have biological activity in preventing the onset of aging phenotypes and possibly extending lifespan. Using the tractable model organism *C. elegans*, our lab has demonstrated that ebselen extends lifespan of *C. elegans* in a dose-dependent manner, slows development, delays the onset of egg-laying, and increased youthful locomotion in aged worms chronically exposed to the drug. To elucidate the mechanism behind ebselen's ability to protect against oxidative stress and slow development, insulin receptor-deficient (*daf-2*) and Nrf2-deficient (*skn-1*) animals were exposed to ebselen, and their phenotypes were scored. DAF-2-deficient animals have been shown to be resistant to oxidative stress and experience a delay in development. However, ebselen-treated *daf-2* animals did not experience an additive or synergistic effect on oxidative stress resistance or development. SKN-1 is a transcription factor with activity that protects against oxidative stress. Interestingly, ebselen requires SKN-1 activity to protect *C. elegans* against oxidative stress and to slow development at 56 hours post hatching.

#### **5. Origin and Evolution of Quaternary Basalts: Camas Prairie Rift Basin, Central Snake River Plain, Idaho**

CATHERINE LEBLANC, MITCHELL TARANTOLO

Research Advisor: Dr. Scott Vetter, Department of Geology, Centenary College of Louisiana

The Camas Prairie, an elongate EW-trending valley that formed as a rift basin during passage of the Yellowstone hotspot, is situated between the late Cretaceous to early Tertiary granitoids of the Idaho Batholith to the north and the Mount Bennett Hills basalt overlying rhyolite basement to the south. The rift basin consists of Pliocene-Holocene sediments derived from the Idaho batholith, interbedded with Quaternary volcanic units that flowed from eruptive centers located in the southern and northern parts of the basin. Basin formation occurred between 5 and 1.8 Ma, based on

limited age control on rifted silicic and basin-filling basalts. The Camas Prairie rift basin resembles other extensional basin-and-range systems.

Hand samples range from dark black to light gray with the darkest samples being aphyric and the lightest samples being plagioclase phyric. The medium gray colored samples tend to be Olivine plagioclase phyric. The typical size of olivines in the olivine phyric samples were approximately 1mm in size, while the plagioclases ranged from a few millimeters to approximately 5mm in size. Approximately one third of the samples were slightly to moderately vesicular.

The samples were analyzed for whole rock major and trace elements. The major elements were determined by EMPA analysis of glass beads. The trace elements were determined by ICP-MS techniques. Results of major element analyses show ranges of: wt.% SiO<sub>2</sub> = 44.8-54.5; wt.% TiO<sub>2</sub> = 1.68 - 3.19; Mg# = 45.46 - 60.19; wt.% K<sub>2</sub>O = 0.36 - 2.21. Norm calculations resulted in all but one sample being olivine normative, the one sample being quartz normative. Trace element concentrations indicate that all samples are light rare earth enriched with no Eu negative anomaly. LaN ranged from 48 to 103 and LuN ranged from 9 to 15. This leads to LaN/LuN of 5.2 to 6.9.

Initial trace element modeling suggests that approximately 55% of olivine plus plagioclase fractionation of our selected parent sample (lowest rare earth concentration of our samples) would result in rare earth concentrations similar to our most evolved rocks in our suite.

#### **6. Attempted synthesis of organomanganese salen complexes**

CEDRIC O. HARRIS, ABIGAIL F. MOODY, AND JASMINE MORRIS

Research Advisor: Dr. Joshua Lawrence, Department of Chemistry, Centenary College of Louisiana

Mn(salen)Cl compounds are known to catalyze chiral epoxidation of alkenes in good yield under mild conditions. In this work, we sought to determine if this reaction could be extended to C-C bond forming reactions by synthesizing Mn(salen)R compounds (R = alkyl and perfluoroalkyl groups). Salen ligands and Mn(salen)Cl compounds were prepared via modified literature procedures, and the isolated Mn(salen)Cl compounds were either (i) treated with organomagnesium reagents or (ii) treated with reducing agents followed by alkyl halide electrophiles. Isolation, characterization, and further reactions of these compounds were performed.

## 7. Rat DEG SubChronic Neurotox Study

MARY PEYTON MCKINNEY

**Research Advisors:** Dr. Kenneth McMartton and Courtney Jamison, Department of Pharmacology, Toxicology, and Neuroscience, Louisiana State University Health Sciences Center, Shreveport, LA

Diethylene glycol is a solvent being used in underdeveloped countries as a replacement for glucose in medications like cough syrup because it is cheaper and easier to manufacture. It is also used in brake fluid, chafing fuels, and as wallpaper strippers which people consume to get high. The following study will be completed over the month of April by Courtney Jamison and Peyton McKinney under Dr. McMartin at LSUSMC Biomedical Research Center. We will be looking at the neurological toxicity of diethylene glycol (DEG) which is already known to cause apoptosis in the proximal tubule cells in the kidneys leading to renal failure as well as partial paralysis in some subjects. Because the main focus of DEG poisoning has been on the kidneys, there is not a lot known on the neurological effects it has. Kidney failure is the main side effect of DEG poisoning but it is only in some cases that the nervous system is affected hence why DEG studies have not looked at the nervous system. Our main focus is looking at the neurological effects of DEG as well as its metabolite diglycolic acid (DGA).

## 8. The Role of EphA2 in Non-Alcoholic Fatty Liver Disease

BRENNNA PEARSON

**Research Advisors:** Drs. Wayne Orr and Alexandra Finney, Department of Pathology, Louisiana State University Health Sciences Center, Shreveport, LA

Non-alcoholic fatty liver disease (NAFLD) is characterized by hepatic steatosis in the absence of heavy alcohol consumption. NAFLD can then lead to NASH, a more severe form of NAFLD characterized by steatosis, fibrosis, ballooning, and inflammation, cirrhosis, or hepatocellular cancer. Little is known about the signaling leading to the progression of NAFLD to NASH, cirrhosis, and hepatocellular carcinoma except for one study that found reduced EphA2 expression in rat models of fatty liver disease. EphA2, or Erythropoietin-Producing Hepatocellular Carcinoma Type A Protein 2, was first isolated from hepatocellular carcinoma and has been known to play a role in the progression of several cancer types, but its role in NAFLD is virtually unknown. This study aims to help characterize the role of EphA2 in NAFLD, using samples from both mice and humans.

## 9. AIFM2- a novel marker for progression of cardiovascular diseases

ALFRED THOMAS

**Research Advisor:** Dr. Sumitra Miriyala, Department of Cellular Biology and Anatomy, Louisiana State University Health Sciences Center, Shreveport, LA

Myocardial ischemia-reperfusion injury results from restoration of normal coronary blood circulation after a prolonged period of circulatory arrest. Oxidative stress is one of the underlying mechanisms for the pathogenesis of ischemia-reperfusion injury. Oxidative stress results from a disturbance in the homeostatic balance between free radical generation and availability of antioxidant molecule to scavenge them. Manganese superoxide dismutase (MnSOD), mitochondrial based antioxidant, is capable of converting superoxide radical ( $O_2\bullet-$ ) into oxygen. Reactive oxygen species cause lipid peroxidation and subsequent production of 4-hydroxy-2-nonenal (4-HNE) from polyunsaturated fatty acid (PUFA). 4-HNE can modify signaling by causing adduction of cellular components such as proteins and nucleic acids. Mice lacking MnSOD specifically in cardiomyocyte (Myh6-SOD2 $\Delta$ ) showed early mortality (~ 4 months) due to mitochondrial dysfunction and subsequent cardiomyopathy. Myh6-SOD2 $\Delta$  mice also had decreased mitochondrial respiration and cardiac performance shown by Seahorse XF analyzer and M-mode echocardiography respectively. Following ischemia-reperfusion injury, MnSOD expression was reduced shown by Real-Time PCR array, Immunoblot, and Immunohistochemistry. Immunoblot analysis of AIFm2 showed increased expression in the ischemic heart. Normally AIFm2 localized to mitochondria, however, following ischemia 4-HNE adducted AIFm2 translocated from mitochondria to nucleus thereby binding to DNA and resultant myocardial apoptosis. With the help of mass spectrometric analysis, it has been shown that His 174 and Cys 187 are two sites of AIFm2 where 4-HNE adduction occurs. These results identify the role of 4-HNE adduction in the regulation of mitochondrial retrograde signaling mediator protein apoptosis-inducing factor associated mitochondrion protein 2 (AIFm2) during myocardial ischemia-reperfusion injury.

## 10. The effects of font on text meaning

MONICA SEWELL

**Research Advisor:** Jessica Alexander, Department of Psychology, Centenary College of Louisiana

In written language, fonts are often used to elicit responses from readers, but there has not been systematic research on how fonts might affect readers' perception of text meaning. However, research on emotional tone of voice has shown that homophones' meaning can be resolved through the speaker's tone of voice. The current study examines whether fonts can resolve the ambiguity of homograph meaning or the emotional valence of ambiguous sentences. Experiment 1 presented homographs and

neutral ambiguous sentences in positive and negative fonts. Emotional valence of the ambiguous sentences was predicted by the font it was presented in. Homographs were also influenced by font, but the differing frequency of homograph definitions interacted with the effect. Experiment 2 replicated and extended experiment 1 using serif and sans-serif fonts instead of overtly positive and negative fonts. These results contribute to our understanding of how form affects reader's activation of linguistic meaning.

## **11. Photosynthesis Capabilities in Space**

BELLA KREKO, EVA SELF, MEKENZIE PESHOFF,  
MEG HAMILTON

Research Advisor: Rebecca Murphy, Department of Biology, Centenary College of Louisiana

The experimental process performed will hopefully provide an answer to the question of whether or not plants can grow in space. Using these results, space exploration can be advanced to the point of growing plants on space stations and on planets without a UV-absorbing atmosphere, paving the way for space colonization. The ozone layer of our atmosphere absorbs most of the UV radiation from Earth, but outer space and other planets, such as Mars, have higher UV radiation levels since there is no absorption layer. Ultraviolet light and fluorescent light were used in this experiment to demonstrate the difference in light between space and Earth, respectively. The reduction of dichlorophenolindophenol (DCPIP) was used in this experiment as a way to quantify the rates of photosynthesis in these differing types of light.

Preliminary data was gathered using cabbage leaves while tomato plants were grown. Once these had enough leaf tissue, half of the plants grown were moved to the UV lightbox, while the other half were left in sunlight. Then, chloroplasts were isolated and the rate of DCPIP reduction in chloroplasts that have been exposed to these light conditions for an extended period of time will be measured.

In order to determine the rate of photosynthesis, DCPIP was used as a hydrogen acceptor for the light-dependent reactions. When combined with a reducing agent, DCPIP becomes colorless; by combining chloroplasts and DCPIP and subsequently treating them with different light conditions, the rate of photosynthesis in these different light conditions were compared using absorption readings.

## **12. Quantifying Rubisco Levels in Multiple Tomato Strains for Future Plant Growth on Mars**

LUISA DELGADILLO, HAYLEY HARDEL, EMMA HYMEL, AND LAUREN MCHAN

Research Advisor: Rebecca Murphy, Department of Biology, Centenary College of Louisiana

As there is growing interest in eventually being able to sustain human life on places other than Earth, there is a need to explore ways to produce crops in space. Before large-scale crop production can be implemented, the basics of how to grow plants in space must be explored. This is a difficult task due to varying light input, limited water supply, potentially dangerous levels of UV rays, high amounts of carbon dioxide, and a lack of necessary nutrients and microorganisms. Because of these many potential problems, we chose to focus on maximizing photosynthesis. Carbon dioxide, one of the inputs of photosynthesis, being in high amounts in the atmosphere on Mars seems beneficial, but there are other rate-limiting factors that may be in play. A better understanding of carbon-fixation in photosynthesis through quantifying amounts of Rubisco in different types of plants on Earth would lead to improving our knowledge of how plants and their many processes are affected by space and help us identify which type would be best to plant in search of a sustainable future of crops on Mars.

The purpose of this experiment is to compare the levels of rubisco found in several different types of tomato plants (Early Girl, Rainbow Blend, and Gardener's Delight) to determine which type of tomato may grow the best in space. The level of rubisco produced by each plant correlates to the amount of photosynthesis production in each plant. If one type of tomato strain results in a higher level of rubisco compared to the other tomato plants, then it may grow more successfully in space due to its increased carbon-fixation ability. To determine the Rubisco levels in each type of tomato plant, proteins were extracted from each plant that was grown, the protein samples were run through an SDS-PAGE, and the gel was stained with Bio-Safe Coomassie. ImageJ was then used to quantify the levels of Rubisco produced by each strain of tomato seed.

**1:30-2:30 RESEARCH PRESENTATIONS, SESSION 1****A. HUMANITIES – WHITED ROOM****African Americans in Paris: Race and Representation in Film and Fashion (Panel)**

Jefferson Hendricks: "African Americans in Paris: Race and Representation in Film and Fashion - An Introduction"

Rosemary McMaster: "Race on the Runway: Black Models and the Battle of Versailles Fashion Show"

Alyssa Fyfe: "*Paris Blues* (1961): Race and Racism with Americans in Paris"

Abbie Boudreaux: "*Round Midnight* (1986): Jazz and The Dark Night of the Soul"

**B. SOCIAL SCIENCES – KILPATRICK AUDITORIUM****1. Smooth sailing or a rough day? Perceived Emotionality of Textural Metaphors**

PEYTON MILLER

Research Advisor: Jessica Alexander, Department of Psychology, Centenary College of Louisiana

People use metaphorical language to understand abstract concepts and communicate complex ideas to others (Lakoff & Johnson, 1980; Thibodeau & Boroditsky, 2011). Lacey et al. (2012) found that reading textural metaphors activates sensory representations, and participants show activity in somatosensory areas responsible for processing touch information. The current study examines how metaphors affect the valence and intensity of emotional content and how presentation modality affects the perceived emotional content of metaphorical language. In experiment 1, participants read sentences that either contained a textural metaphor or a non-metaphorical descriptor. They then rated the emotionality, positivity, and negativity of each sentence. Sentences containing metaphors were rated as more emotional than literal sentences. In experiment 2, participants rated the same sentences, presented visually on screen (as in Exp. 1), auditorily over headphones, or both visually and auditorily. The results of these studies will contribute to our understanding of metaphorical language and sensory representations.

**2. Centenary College Student Managed Investment Fund**

SCOTT HALPER, ARPANA NEUPANE, ALEXIS PECINA, ERIN ROSTRO, AND BLAKE SMITH

Research Advisor: Dr. Barbara Davis, The Frost School of Business, Centenary College of Louisiana

The purpose of the Centenary College Student Managed Investment Fund is to facilitate the academic objective of teaching the theory and practice of managing long-term investment portfolios with annual spending objectives through a real-world environment within the Frost School of Business. During the course of their working careers, many Centenary business school graduates will accept the obligation to serve in a fiduciary capacity with responsibility for the administration of endowment or pension funds. Accordingly, this fund is used to expose Centenary finance students to investment policy development, asset allocation strategy analysis, investment manager selection and evaluation, and investment performance measurement.

The SMIF began operations on April 23, 2004 with an initial contribution by a Centenary College donor of \$100,000. The SMIF operates under guidelines of a written Investment Policy Statement with a "Spending Rule" of 5.5%. The SMIF is viewed as a separate investment manager within the Centenary College of Louisiana Endowment and Investment Fund. The blended benchmark for the SMIF is: 55% S&P500 / 15% MSCI-EAFE / 30% Bloomberg Barclays Aggregate Bond Index.

Since inception, there have been \$129,155, tax deductible, contributions into the SMIF and \$72,243 investment policy directed distributions to Centenary College. As of December 31, 2018, the ending market value was \$165,843 and the dollar gain since inception has been \$108,931. Since the beginning of operations, the annual compound rate of return has been 5.81% and SMIF blended benchmark return has been 6.15%.

**C. NATURAL SCIENCES – MICKLE 114****1. Does Hydrogen Sulfide Inhibit DNA Double Strand Break Repair?**

ANJUNI SINGH

Research Advisor: Dr. Lynn Harrison, Department of Physiology, Louisiana State University Health Sciences Center, Shreveport, LA

Glioblastoma multiforme (GBM) is the most common primary malignant brain tumor. It has a WHO grade of IV, which is the highest classification of tumors regarding their rate of growth and spreading. Additionally, GBM is a particularly difficult cancer to treat due to its high resistance to both radio- and chemotherapy. Patients with GBM who receive normal

treatment have a median survival rate of 15-16 months; however, no developments in treatments for this cancer have been put into clinical use since 2005, and the median survival rate in treated patients has not changed. Our lab has determined that treating GBM cells with Na<sub>2</sub>S (which releases H<sub>2</sub>S) after the cells undergo radiation increases the rate of cell death in the tumor cell, while reducing damage to surrounding endothelial cells. This is important due to the pleomorphic nature of GBM (also reflected in its WHO grading). We have also discovered the addition of H<sub>2</sub>S increases DNA damage in GBM cells after exposure of the GBM to radiation. However, the mechanism for this is unknown. One idea is that H<sub>2</sub>S inhibits DNA double strand break repair, which increases DNA damage and therefore cell death in the tumor. To investigate this, T98G cells (from GBM cells) and D3 cells (from cerebral endothelial cells) were transfected with plasmid DNA that was linearized in order to test the cell's ability to repair its DNA through double strand break repair mechanisms. This plasmid allowed for the expression of green fluorescent protein (GFP) after the DNA underwent the non-homologous end joining (NHEJ-I) repair mechanism. Plasmid assays were used to study the expression of GFP in the tumor cells treated with Na<sub>2</sub>S after radiation exposure and determine whether the inhibition of DNA double strand break repair is the cause behind the effectiveness of Na<sub>2</sub>S treatment of GBM cells.

## **2. Glutathione Regulation on Tumor Angiogenesis**

AMIR KASKAS

Research Advisors: Drs. Nabil Rashdan, Bandana Shrestha, Christopher Pattillo, Department of Molecular and Cellular Physiology, Louisiana State University Health Sciences Center, Shreveport, LA

The activation of vascular endothelial growth factor (VEGF) receptors induces an important pathway that stimulates the formation of new blood vessels. Overexpression of VEGF is implicated in the growth and metastasis of tumor cells, but treatments that target VEGF concentrations in cancer patients prove less effective than anticipated. Oxidative stress, a condition common to tumor cells, also promotes VEGF expression, and it is typically regulated by antioxidants such as reduced glutathione (GSH). As GSH reacts with reactive oxygen species, it converts into oxidized glutathione (GSSG); GSH:GSSG ratio commonly serves as an effective measure for oxidative stress. Additionally, it has previously been shown that decreased ratios of GSH:GSSG are common to patients with a variety of tumors. We hypothesize that VEGF receptor-linked pathways are activated by this decrease of GSH:GSSG ratio, and that oxidized GSSG serves as a potential activator of VEGFR2-linked pathways in tumor growth. This study seeks to examine the effects of intracellular and extracellular GSH:GSSG concentrations on VEGFR2 activation in tumor cells, grown in both hypoxic and normoxic conditions. To study these phenomena without the influence of VEGF, CRISPR-Cas9 gene editing techniques were performed to knockout VEGF gene expression prior to experimentation.

## **2:45-3:45 RESEARCH PRESENTATIONS, SESSION 2**

### **A. HUMANITIES – WHITED ROOM**

#### **Literary Theory and Pop Culture (Panel)**

ABBIE BOUDREAUX, DANNY PAULK, HARRISON STARRETT

Pop culture, through its ubiquity, has the power to make complex theoretical language and concepts more accessible to a broader range of people. In this panel presentation, Danny Paultk, Abbie Boudreux, and Harrison Starrett will apply critical theory to various works of popular film and literature. By combining feminism and horror movies, disability studies and Disney, and post-colonial studies and a SF novel, this panel will introduce theoretical concepts and apply them to familiar media, thus expanding both the audience's understanding of these everyday texts and their understanding of introductory theory.

### **B. SOCIAL SCIENCES – KILPATRICK AUDITORIUM**

#### **A Caf Design for You (Panel)**

PRESENTERS: MICHAELA BRANTLEY, BETZA BRAVO CARMONA, CAMILLE CHOPIN, SARAH FAULHABER, SERENA GALLEGOS, CASSANDRA GONZALES, ASPEN HATTELY, RACHEL HUGHES, REGIS JOHNSON, PAYTON LEBLANC, SIERRA PONDER, ELENA RING, MAKENZIE SHAW, BAILEY WHITE, EMILY WILSON

Research Advisor: Amy Hammond, Department of Psychology, Centenary College of Louisiana

Psychology of Design is a class that explores the systems and environments that people interact with in everyday life, placing a focus on maximizing usability and safety. For this project, we explored the environment of Centenary's cafeteria, the Caf, which is scheduled to undergo renovations. As a class, we analyzed the current configuration of the food service and dining areas. The class split into two groups—one to work with Sodexo employees and one to work with students, faculty, and staff who eat at the Caf. Through interviews, surveys, and observations, we analyzed the interactions between each group and this environment to identify potential problems with the current system and to propose research-based suggestions for possible improvements.

Following the presentation, the class will invite the audience to participate in a hands-on activity that will enable them to learn some of the concepts of human factors psychology and understand how it could be used to improve their lives.

**C. NATURAL SCIENCES – MICKLE 114****1. An Ear-ie Coincidence: Conserved Pathways Regulate Photoperiodic Flowering in Maize and Sorghum**

REBECCA L. MURPHY

The domestication of maize began around 9,000 years ago by indigenous farmers in Mexico. As cultivation spread north to more temperate environments, plants were selected for decreased photoperiod sensitivity. Today's modern commercial lines are now very nearly day neutral. Present day maize now feeds millions globally, making it one of the most agriculturally important crops in the world. Because the precise timing of maturation is so intricately linked to grain yield and quality, understanding the regulation of this pathway has become central in the accelerated improvement of maize as we anticipate the demands the ever-increasing world population will have on this globally important crop. Though several genes have been identified that affect photoperiodic flowering in maize, including *ZmCCT* and *INDETERMINATE 1 (ID1)*, the understanding of floral regulation in this species is far from complete. In this study, we identify the maize ortholog of *Early heading date 1 (Ehd1)* for the first time and characterize its role in ZmCCT-mediated photoperiodic flowering, while providing preliminary evidence for the loss of the PRR37 regulatory branch that is present in closely related species.

**2. Flow-mediated vasodilation (FMD) of the femoral artery in mouse – a non-invasive detection of endothelial-dependent vascular dysfunction**

AHMAD J. KASABALI

Research Advisors: Drs. Gopi K. Kolluru and Christopher G. Kevil, Department of Pathology, Louisiana State University Health Sciences Center, Shreveport, LA

Nitric oxide (NO) and hydrogen sulfide (H<sub>2</sub>S) are gaseous signaling molecules that are released in the vascular system. NO and H<sub>2</sub>S are key in regulation of endothelial function for the maintenance of blood flow, vasodilation, and vascular remodeling in the mammalian system. Dysregulation of NO/H<sub>2</sub>S signaling contributes to dysfunction of the vasculature. Past studies have relied on invasive or tissue explant techniques including femoral artery ligation and myography, to assess endothelial function. Flow mediated vasodilation (FMD) is a non-invasive and reliable technique for the measurement of endothelial function.

In the FMD model, the mouse underwent a temporary occlusion of the limb for 1-minute using an inflatable cuff. Following the release of the cuff, doppler ultrasound was used to measure changes in blood flow. This lab has tested endothelial function with FMD in wild type (WT) mice (C57BL6/J), CSE knockout (CSEKO), and eNOS knockout (eNOSKO)

mice. Real time measurements of vascular diameter changes and blood flow velocity have been collected that reflect vascular function and health. Treatment with a sulfide donor drug was used to quantify the restoration in endothelial function.

These results show the femoral artery vasodilation response using transgenic mouse models that have defective endothelial function. Mice deficient in CSE or eNOS show a significantly blunted flow mediated vasodilation response when compared to WT control mice. Treatment with a sulfide donor showed recovery in endothelial function in the KO mouse models, as comparable to the WT measurements.

**4:00-5:00 RESEARCH PRESENTATIONS, SESSION 3****A. HUMANITIES I – WHITED ROOM****African Americans in Paris: Race and Representation in Dance and Literature (Panel)**

Andia Augustin-Billy: "African Americans in Paris: Race and Representation in Dance and Literature - An Introduction"

Melissa Sisemore: "The Alvin Ailey Dance Troupe in Paris: Dancing in the Streets and on the Stage"

Callie Fedd: "Escaping the Shadow of Giants: Shay Youngblood's *Black Girl in Paris*"

Danny Paulk: "The Black Body and the Black Voice in Elizabeth Alexander's "Venus Hottentot"

**B. HUMANITIES II – MICKLE 114****1. Anxieties of Suburbia in Philip K. Dick's *Do Androids Dream of Electric Sheep?***

JEANNE HAMMING

In this paper I discuss Philip K. Dick's 1968 novel *Do Androids Dream of Electric Sheep?*, the source novel for Ridley Scott's 1982 film, *Blade Runner*. The novel tells the story of futuristic bounty hunter Rick Deckard as he struggles to maintain his identity in a technologized world populated by human-like androids and electric animals. Set in a post-apocalyptic, future-world of swirling radioactive dust, decay, and perpetual darkness in the aftermath of "World War Terminus," *Do Androids Dream of Electric Sheep?* explores the social, psychological, and ecological consequences of a natural world mediated by techno-cultural fantasies of domination and control. At stake for the novel's protagonist is an essentialist (read: authentic) ground for masculine identity that is imagined as existing in Nature. Reading the novel in the context of 1950s suburban "organization men," I argue that Dick laments the loss of "natural" or exurban configurations of masculinity that are associated with the absence of technological mediations of self and reality.

## **2. From Gibson to Monáe: Our Changing Relationship with Embodiment in Cyberpunk**

SARAH COOK

In this paper I discuss the changing role of embodiment in cyberpunk media by studying the differences between William Gibson's 1984 novel, *Neuromancer*, and Janelle Monáe's 2018 Emotion Picture, *Dirty Computer*. *Neuromancer* presents a theme of yearning to escape the imperfect, often gross human body in an effort to become more perfect than the physical body allows. As one of the first works of cyberpunk fiction, the novel – and therefore its straight, white, male author – set the tone for the rest of the genre for decades. As a result, cyberpunk fiction pursued this dream of escaping the body for decades. I argue that newer works of cyberpunk like *Dirty Computer* are rejecting this dream because the reins of the genre are being handed over to minorities who have an entirely different relationship with their bodies than their straight, white, and male predecessors.

## **3. Janelle Monáe's *Dirty Computer*: The American Dream and The Black Experience**

BRIANA HOLMES

In this presentation, I will consider Janelle Monáe's *Dirty Computer* as a work of Afrofuturism, which Alondra Nelson defines as, "a critical perspective that opens up an inquiry into the many overlaps between technoculture and black diasporic histories." In my presentation, I will examine Monáe's commentary on the myth of the American Dream as it relates to black, female, and queer experiences. I will also briefly include topics such as female sexuality and power that are shown in the movie.

## **C. SOCIAL SCIENCES– KILPATRICK AUDITORIUM**

### **1. Like" me: How social inclusion vs. exclusion affects mental representations of one's own face**

OLE EDVARD GRANRUD

Research Advisor: Peter Zunick, Department of Psychology, Centenary College of Louisiana

Are people's mental representations of their own faces fixed, or can they be altered? To find out, we tested whether highlighting exclusion or inclusion experiences on social media might alter the attractiveness of participants' mental representations of their own faces. We designed a biased questionnaire (Petrocelli, Martin, & Li, 2010; Salancik & Conway, 1975) priming participants to feel included or excluded on social media, expecting those in the inclusion condition to hold more attractive mental representations of themselves (controlling for their actual attractiveness) than those in the exclusion condition. In other words, we expected that priming inclusion vs. exclusion would lead participants to imagine their

own faces as either more or less attractive than they actually appear. We used Reverse Correlation Image Classification (RCIC), a popular tool for studying the mental representations held of others (Imhoff & Dotsch, 2013), to estimate participants' mental representations of their faces, and we will recruit a second group of participants to rate these estimates based on their attractiveness. Data collection will be completed by mid-October 2018.

## **2. Transforming Transgender Perception: Exploring Correlations Between Beliefs about Gender and Visual Representations of Transgender People**

WILLIAM MORRISON

Research Advisor: Peter Zunick, Department of Psychology, Centenary College of Louisiana

This study explores how one's attitudes towards gender, marginalized gender groups, and politics correlate with how one visualizes a specific transgender woman in their minds. Participants who believe that gender is innate and immutable visualize a transgender woman as more masculine; picturing a transgender woman as masculine may be a personal way of internally invalidating her identity. Participants who reject prescriptivism of women to gender roles visualized a transgender woman as more masculine. This finding suggests that such people believe that women, whether cisgender or transgender, need not be feminine to be women. This study provides insight into how transgender women are perceived and why, opening doors for future research examining whether this distortion is a cause or result of prejudice.

## **3. Heteronormative Influences on Same Sex Couples**

AMANDA FARR

Research Advisor: Dr. Michelle Wolkomir, Department of Sociology, Centenary College of Louisiana

The sex/gender system acts as one of the most influential systems in contemporary society, structuring societal institutions, individual identities, and interpersonal relationships. The dominant relationship form within this system is heterosexual monogamy, within which men and women follow a set of (hetero)gendered scripts. Homosexual individuals, however, do not have a culturally intelligible model to structure their relationships and therefore no set gendered scripts. So what do they do? Using in-depth interviews with six lesbian couples and five gay couples, this study examines how the traditional gender power dynamics embedded in the dominant model impact individuals in same sex relationships. As the lesbian and gay couples in this study perceive and discuss themselves, their partners, and their relationships, they ultimately show how they can conform to, resist, and/or become liberated

by (hetero)gendered notions. The different ways that these couples navigate their relationships in a society centered around heteronormativity demonstrate the possibility of creating a new type of framework that is built on gender equality rather than masculine dominance.

### **5:00-7:00 Dinner in the Quad (The Fit if bad weather)**

*Sponsored by Campus Activities Board*

## **7:30-9:00 VISUAL AND PERFORMING ARTS**

### **ANDERSON AUDITORIUM**

#### **A. A Choral Study of Death**

DEVIN BUREAU, MUSIC

*Lamentations and Mercies* are a modern exploration of the structure of early church music. The text, especially in *Mercies*, is an exploration of Christian burial and funeral rites, drawing from the *Kyrie Eleison*, *Miserere mei Deus*, Psalm 23, the Greek Orthodox *Kontakion* and *Ikhos* of the dead, and the *Libera me*. The structure of *Lamentations* is Soprano, Alto, Tenor, Bass with Soprano descant. *Lamentations*, while not particularly exploring the harmonic structure of early church music, still explores death and utilizes large amounts of text painting. *Mercies* is more harmonically built in the style of early church music using open fourths and fifths. *Mercies* is Soprano, Alto, Tenor, Bass with two solos for either soprano or tenor.

#### **B. If It Ain't Baroque, Don't Fix It: a comparison of Handel and Rossini**

VICTORIA SUNDIN, MUSIC

George Frederic Handel (1685-1759) was one of the chief pioneers of Baroque music, composing and popularizing opera and oratorio in the West. Sixty-four years later, Romantic composer Gioachino Rossini premiered the opera *Semiramide* in Venice, Italy in 1823, which was composed in the Baroque style. Both sets of music, although from different centuries, have many similarities, as Rossini imitates the Baroque style of music represented by Handel. In this presentation, I will be performing Handel's arias "Amor Commanda" from *Floridante* and "Care Selve" from *Atalanta*, as well as his oratorio piece "Singe Seele Gott zum Preise," and Rossini's aria "Bel Raggio Lusinghier" from his opera *Semiramide*.

#### **C. Monologue: No Exit / Scene: Incognito / Scene: The Odd Couple**

CHARLES ROOPOLLO, CASON HANCOCK, THEATRE

Charles Roppolo and his scene partner, Cason Hancock, will perform their competition pieces from the Kennedy Center American College Theatre Festival. Their performance package includes a monologue from *No Exit* by Jean-Paul Sartre, a scene from *Incognito* by Nick Payne, and a

scene from *The Odd Couple* by Neil Simon.

#### **D. Scene: Brighton Beach Memoirs / Monologue: Venus in Fur**

MADISON GABLE, CHRISTIAN STEWART, THEATRE

Madison Gable and her scene partner, Christian Stewart, will perform their competition pieces from the Kennedy Center American College Theatre Festival. Their performance package includes a scene from *Brighton Beach Memoirs* by Neil Simon, and a monologue from *Venus in Fur* by Steven Dietz.

#### **E. Monologue: Angels in America / Scene: August: Osage County / Scene: The Boys Next Door**

KENNEDY WILCHER, TUCKER "PJ" SOUTHER, THEATRE

Kennedy Wilcher and her scene partner, Tucker "PJ" Souther, will perform their competition pieces from the Kennedy Center American College Theatre Festival. Their performance package includes a monologue from *Angels in America* by Tony Kushner, a scene from *August: Osage County*, and a scene from *The Boys Next Door* by Tom Griffen.

#### **F. Sci-Port Discovery Center Rebranding & Advertising Campaign**

SABRINA HANDAL, ART

Sci-Port Discovery Center is a children's science museum in Shreveport that recently went through a reopening. Consequently, I decided to refresh Sci-Port's image with a branding and advertising redesign. The target audience for this campaign is elementary school children, their parents, and their teachers. This campaign seeks to convey Sci-Port's emphasis on multidisciplinary and interactive learning. Moreover, it presents the museum as a place full of whims and fun, while still being educational for the whole family. The campaign's creative strategy is to convince parents and children to attend Sci-Port Discovery Center regularly instead of other attractions because only in Sci-Port they would get both an entertaining and educational experience that would satisfy the whole family. Learning never ends there.

**G. Creative Writing Finalists for the Audrey M.  
Smith Endowed Poetry Award and the  
Zeak Monroe Buckner Creative Writing Award  
(in alphabetical order):**

**AUDREY M. SMITH ENDOWED POETRY AWARD**

BRIAN FLYNN, "Country Road Out of Bossier," "The Old Men Are Nostalgic for War," "Girl from Tuscaloosa," and "Outside a Giant Eagle Supermarket"

DANNY PAULK, "what gay kids are good for," "Revisionist Eden," "Caduceus," and "the porcupine"

MARISSA RAMSEY, "The Silence of the Rinse Cycle," "Demon Math," and "Sand Siren"

**ZEAK MONROE BUCKNER CREATIVE WRITING AWARD**

BRIAN FLYNN, "Heathens"

ROSEMARY MCMASTER, "A Confessional Account of Student Life at a Bat-Shit Crazy College"

DANNY PAULK, "Don't Feed the Wolves"



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